



Solve each problem. Answer as a decimal (if necessary).

1) 5×10^3 is _____ \times the value of 9×10^6

2) 2×10^3 is _____ \times the value of 6×10^4

3) 3×10^3 is _____ \times the value of 6×10^4

4) 7×10^9 is _____ \times the value of 4×10^2

5) 4×10^7 is _____ \times the value of 7×10^3

6) 9×10^4 is _____ \times the value of 7×10^8

7) 6×10^9 is _____ \times the value of 7×10^7

8) 3×10^9 is _____ \times the value of 5×10^2

9) 2×10^5 is _____ \times the value of 8×10^4

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____



Solve each problem. Answer as a decimal (if necessary).

1) 5×10^3 is _____ \times the value of 9×10^6

$$\frac{5 \times 10^3}{9 \times 10^6} = \frac{5}{9} \times \frac{10^3}{10^6} = \frac{5}{9} \times 10^{-3} = 0.556 \times 10^{-3}$$

2) 2×10^3 is _____ \times the value of 6×10^4

$$\frac{2 \times 10^3}{6 \times 10^4} = \frac{2}{6} \times \frac{10^3}{10^4} = \frac{1}{3} \times 10^{-1} = 0.333 \times 10^{-1}$$

3) 3×10^3 is _____ \times the value of 6×10^4

$$\frac{3 \times 10^3}{6 \times 10^4} = \frac{3}{6} \times \frac{10^3}{10^4} = \frac{1}{2} \times 10^{-1} = 0.5 \times 10^{-1}$$

4) 7×10^9 is _____ \times the value of 4×10^2

$$\frac{7 \times 10^9}{4 \times 10^2} = \frac{7}{4} \times \frac{10^9}{10^2} = \frac{7}{4} \times 10^7 = 1.75 \times 10^7$$

5) 4×10^7 is _____ \times the value of 7×10^3

$$\frac{4 \times 10^7}{7 \times 10^3} = \frac{4}{7} \times \frac{10^7}{10^3} = \frac{4}{7} \times 10^4 = 0.571 \times 10^4$$

6) 9×10^4 is _____ \times the value of 7×10^8

$$\frac{9 \times 10^4}{7 \times 10^8} = \frac{9}{7} \times \frac{10^4}{10^8} = \frac{9}{7} \times 10^{-4} = 1.286 \times 10^{-4}$$

7) 6×10^9 is _____ \times the value of 7×10^7

$$\frac{6 \times 10^9}{7 \times 10^7} = \frac{6}{7} \times \frac{10^9}{10^7} = \frac{6}{7} \times 10^2 = 0.857 \times 10^2$$

8) 3×10^9 is _____ \times the value of 5×10^2

$$\frac{3 \times 10^9}{5 \times 10^2} = \frac{3}{5} \times \frac{10^9}{10^2} = \frac{3}{5} \times 10^7 = 0.6 \times 10^7$$

9) 2×10^5 is _____ \times the value of 8×10^4

$$\frac{2 \times 10^5}{8 \times 10^4} = \frac{2}{8} \times \frac{10^5}{10^4} = \frac{1}{4} \times 10^1 = 0.25 \times 10^1$$

Answers

1. **0.000556**

2. **0.0333**

3. **0.05**

4. **17,500,000**

5. **5,710**

6. **0.0001286**

7. **85.7**

8. **6,000,000**

9. **2.5**